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PATENT APPLICATION

ATTORNEY DOCKET NO. 200210233-1IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Mark Haines et al.

Confirmation No.: 8480

Application No.: 10/635,636

Examiner: Geoffrey S. Mruk

Filing Date: August 8, 2003

Group Art Unit: 2853

Title: FILTER FOR PRINTHEAD ASSEMBLY

Mail Stop Appeal Brief-Patents  
Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450TRANSMITTAL OF APPEAL BRIEFTransmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on June 13, 2006.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:☐ 1st Month  
\$120☐ 2nd Month  
\$450☐ 3rd Month  
\$1020☐ 4th Month  
\$1580☐ The extension fee has already been filed in this application.☒ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of \$ 500 . At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.18 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

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Typed Name: Scott A. Lund

Signature: 

Respectfully submitted,

Mark Haines et al.

By: 

Scott A. Lund

Attorney/Agent for Applicant(s)

Reg No. : 41,166

Date : August 10, 2006

Telephone : (612) 573-2006

Rev 10/05 (Ap/Brief)

AUG 10 2006

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Mark Haines et al. Examiner: Geoffrey S Mruk  
Serial No.: 10/635,636 Group Art Unit: 2853  
Filed: August 6, 2003 Docket No.: 200210233-1  
Title: FILTER FOR PRINTHEAD ASSEMBLY

**CERTIFICATE OF TRANSMISSION**

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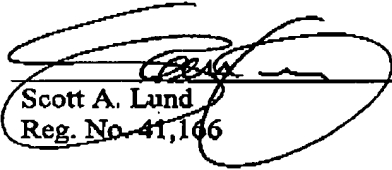
1. Transmittal Letter for Appeal Brief (1 pg.); and
2. Appeal Brief under 37 C.F.R. (13gs.)

Respectfully submitted,

Mark Haines et al.,

DICKE, BILLIG & CZAJA, PLLC  
Fifth Street Towers, Suite 2250  
100 South Fifth Street  
Minneapolis, MN 55402  
Telephone: (612) 573-2006  
Facsimile: (612) 573-2005

Date: August 10, 2006  
SAL:hsf

By:   
Scott A. Lund  
Reg. No. 41,166

**15 PAGES - INCLUDING COVER PAGE**

AUG 10 2006

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Mark Haines et al.	Examiner:	Geoffrey S. Mruk
Serial No.:	10/635,636	Group Art Unit:	2853
Filed:	August 6, 2003	Docket No.:	200210233-1
Title:	FILTER FOR PRINTHEAD ASSEMBLY		

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**Mail Stop Appeal Brief – Patents**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir/Madam:

This Appeal Brief is submitted in support of the Notice of Appeal filed June 13, 2006, appealing the rejection of claims 1-10, 12, and 13 of the above-identified application as set forth in the Final Office Action mailed February 14, 2006.

The U.S. Patent and Trademark Office is hereby authorized to charge **Deposit Account No. 08-2025** in the amount of **\$500.00** for filing a Brief in Support of an Appeal as set forth under 37 C.F.R. § 41.20(b)(2). At any time during the pendency of this application, please charge any required fees or credit any overpayment to Deposit Account No. 08-2025.

Appellant respectfully requests reconsideration and reversal of the Examiner's rejection of pending claims 1-10, 12, and 13.

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**Appeal Brief to the Board of Patent Appeals and Interferences  
of the United States Patent and Trademark Office**

Appellant: Mark Haines et al.

Serial No.: 10/635,636

Filed: August 6, 2003

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of the United States Patent and Trademark Office**

Appellant: Mark Haines et al.

Serial No.: 10/635,636

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**REAL PARTY IN INTEREST**

The real party in interest is Hewlett-Packard Development Company, LP having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

**RELATED APPEALS AND INTERFERENCES**

Appellant submits that there are no related appeals or interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal.

**STATUS OF CLAIMS**

Claims 1-10, 12, and 13 are pending in the application (see Claims Appendix), and are the subject of the present Appeal.

Claims 1-8, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Arashima et al. US Patent No. 5,481,289.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arashima et al. US Patent No. 5,481,289 in view of Lattuca et al. US Patent No. 6,398,354.

**STATUS OF AMENDMENTS**

No amendments have been entered subsequent to the Final Office Action mailed February 14, 2006. The claims listed in the Claims Appendix, therefore, reflect the claims as of February 14, 2006.

**SUMMARY OF THE CLAIMED SUBJECT MATTER**

One aspect of the present invention, as claimed in independent claim 1, provides a filter for a printhead assembly. The filter includes a frame (110) having a first face (116) and a second face (117) opposite the first face, and an opening (112) formed therein communicated with the first face and the second face; separate filter material (140,140) provided on each the first face and the second face of the frame, and enclosing the opening of the frame; and a fluid fitting (120/130) associated with the frame, the fluid fitting including a

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fluid port (122/132) offset from the frame and a fluid passage (124/134) communicated with the opening of the frame and the fluid port (see, e.g., page 12, line 7 - page 13, line 22; Fig. 11).

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Appellant seeks review of the rejection of claims 1-8, 12, and 13 under 35 U.S.C. 102(b) as being anticipated by Arashima et al. US Patent No. 5,481,289, and the rejection of claims 9 and 10 under 35 U.S.C. 103(a) as being unpatentable over Arashima et al. US Patent No. 5,481,289 in view of Lattuca et al. US Patent No. 6,398,354.

**ARGUMENT**

**I. Rejection Under 35 U.S.C. §102**

**A. Applicable Law**

To anticipate a claim under 35 U.S.C. 102, a reference must teach every element of the claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference").

**B. Rejection of claims 1-8, 12, and 13 under 35 U.S.C. §102(b)**

Because the Arashima et al. US Patent No. 5,481,289 fails to teach each and every element of the claims, the rejection of claims 1-8, 12, and 13 under 35 U.S.C. 102(b) is not correct and should be withdrawn.

Independent claim 1 is directed to a filter for a printhead assembly and includes "a frame having a first face and a second face opposite the first face, and an opening formed therein communicated with the first face and the second face;" "separate filter material provided on each the first face and the second face of the frame, and enclosing the opening of the frame;" and "a fluid fitting associated with the frame, the fluid fitting including a fluid port offset from the frame and a fluid passage communicated with the opening of the frame and the fluid port."

The Arashima et al. patent discloses an ink supply mechanism which supplies ink from an ink container (19) for storing ink to an ink jet recording unit which discharges ink

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wherein the ink supply mechanism comprises a first filter member (70) provided in an ink outlet section or ink leading-out port (94) of the ink container (19); an ink supply passage or tube (52) which conductively connects the ink jet recording unit and the ink container (19) for supplying ink from the ink container (19) to the ink jet recording unit; and a second filter member (63) provided in the ink supply passage (52) between ink discharging ports (30) of the recording unit and the first filter member (70) (see Fig. 7; Abstract; col. 10, lines 55-61).

As such, the first filter member (70) of the Arashima et al. patent is provided in the ink outlet section or ink leading-out port (94) of the ink container and the second filter member (63) of the Arashima et al. patent is provided in the ink supply passage or tube (52) (see Fig. 7; col. 10, lines 55-61). In addition, the ink supply tube (52) of the Arashima et al. patent communicates with the ink outlet section or ink leading-out port (94) of the ink container (19) and the ink discharging ports (30) of the recording unit. The first and second filter members (63 and 70) of the Arashima et al. patent, however, are not provided on opposite faces of a frame of the ink supply mechanism and do not enclose an opening of the frame. Furthermore, the ink supply tube (52) of the Arashima et al. patent does not include a fluid port offset from a frame of the ink supply mechanism and a fluid passage communicated with the opening of the frame (as enclosed by separate filter material provided on opposite faces of the frame) and the fluid port.

Appellant, therefore, submits that the first filter member (70) and the second filter member (63) of the Arashima et al. patent do not constitute separate filter material provided on opposite first and second faces of a frame and enclosing an opening of the frame, as claimed in independent claim 1, and submits that the ink supply tube (52) of the Arashima et al. patent does not constitute a fluid fitting including a fluid port offset from a frame of the ink supply mechanism and a fluid passage communicated with the opening of the frame and the fluid port, as claimed in independent claim 1.

For at least the reasons set forth above, Appellant submits that the Arashima et al. patent does not teach or suggest each and every element of independent claim 1. Accordingly, Appellant submits that independent claim 1 is patentably distinct from the Arashima et al. patent. Furthermore, as dependent claims 2-8, 12, and 13 further define patentably distinct claim 1, Appellant submits that these dependent claims are also patentably distinct from the Arashima et al. patent. Appellant, therefore, respectfully submits that the

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rejection of claims 1-8, 12, and 13 under 35 U.S.C. 102(b) is not correct and should be withdrawn, and that claims 1-8, 12, and 13 should be allowed.

## **II. Rejection Under 35 U.S.C. §103**

### **A. Applicable Law**

Under 35 U.S.C. §103, the Examiner has the burden to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Three criteria must be satisfied to establish a *prima facie* case of obviousness. First, the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would teach, suggest, or motivate one to modify a reference or to combine the teachings of multiple references. *Id.* Second, the prior art can be modified or combined only so long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Third, the prior art reference or combined prior art references must teach or suggest all of the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). These three criteria are also set forth in M.P.E.P §706.02(j). Even when obviousness is based on a single reference, there must be a showing of suggestion or motivation to modify the teachings of that reference. *In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). In performing the obviousness inquiry under 35 U.S.C. §103, the Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990), *reh'g denied*, 1990 U.S. App. LEXIS 19971 (Fed. Cir. 1990).

### **B. Rejection of claims 9 and 10 under 35 U.S.C. §103(a)**

Because the rejection of claims 9 and 10 under 35 U.S.C. 103(a) as being unpatentable over Arashima et al. US Patent No. 5,481,289 in view of Lattuca et al. US Patent No. 6,398,354 fails to establish a *prima facie* case of obviousness, the rejection of claims 9 and 10 is not correct and should be withdrawn.

Regarding claims 9 and 10, the Examiner contends that the Arashima et al. patent discloses the fluid passage (Fig. 7, volume of element 52) of the fluid fitting has a surface oriented at an angle to the longitudinal axis of the fluid port (Fig. 7, element 52) (Final Office Action, page 5). The Examiner recognizes, however, that the Arashima et al. patent fails to disclose the angle is approximately a right angle and the angle is an acute angle (Final Office



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Action, page 5). Accordingly, the Examiner contends that the Lattuca et al. patent discloses a printhead apparatus (Fig. 1) where the fluid passage (Fig. 9, element 110) of the fluid fitting (Fig. 9, element 86) has a surface (Fig. 9, element 88) oriented at an angle to the longitudinal axis of the fluid port (Fig. 9, element 86), where the angle is approximately a right angle (Fig. 6, angle between elements 86 and 88; Column 4, line 30, i.e. cylindrical tower) and the angle is an acute angle (Fig. 9, angle between elements 86 and 88; Column 5, lines 45-60) (Final Office Action, page 5). As such, the Examiner suggests that at the time of the invention, it would have been obvious to one of ordinary skill in the art to use the filtration device disclosed by Lattuca in the ink supply mechanism of Arashima (Final Office Action, page 5).

Claims 9 and 10 each depend from independent claim 1 and, as such, each include the limitations of independent claim 1. As outlined above, Appellant submits that the first filter member (70) and the second filter member (63) of the Arashima et al. patent do not constitute separate filter material provided on opposite first and second faces of a frame and enclosing an opening of the frame, as claimed in independent claim 1, and submits that the ink supply tube (52) of the Arashima et al. patent does not constitute a fluid fitting including a fluid port offset from a frame of the ink supply mechanism and a fluid passage communicated with the opening of the frame and the fluid port, as claimed in independent claim 1.

The Lattuca et al. patent discloses an ink filtration device 28 including a body portion 30 which includes a chamber 32 containing a filtration member 34 which separates an unfiltered ink area 36 from a filtered ink area 38 such that the filtered ink area 38 is in flow communication with a filtered ink outlet port 40 of the filtration device 28 and the filtered ink outlet port 40 is in flow communication with the ink flow path feeding ink to the printheads 14 (col. 3, lines 43-53; FIG. 3). The Lattuca et al. patent, however, does not disclose separate filter material provided on opposite first and second faces of a frame and enclosing an opening of the frame, as claimed in independent claim 1, and does not disclose a fluid fitting including a fluid port offset from a frame of a ink supply mechanism and a fluid passage communicated with an opening of the frame and the fluid port, as claimed in independent claim 1. As such, Appellant submits that the Lattuca et al. patent does not overcome the shortcomings of the Arashima et al. patent. Appellant, therefore, submits that modifying the Arashima et al. patent in view of the Lattuca et al. patent, in the manner suggested by the Examiner, does not teach or suggest all of the limitations of the present claims. To establish

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*prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

In view of the above, Appellant submits that the Examiner has not established a *prima facie* case of obviousness of claims 9 and 10. Appellant, therefore, respectfully submits that the rejection of claims 9 and 10 under 35 U.S.C. §103(a) is not correct and should be withdrawn, and that claims 9 and 10 should be allowed.

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**CONCLUSION**

For the above reasons, Appellant respectfully submits that the art of record neither anticipates nor renders obvious the claimed invention. Thus, the claimed invention does patentably distinguish over the art of record. Appellant, therefore, respectfully submits that the above rejections are not correct and should be withdrawn, and respectfully requests that the Examiner be reversed and that all pending claims be allowed.

Any inquiry regarding this Appeal Brief should be directed to either Thomas A. Jolly at Telephone No. (541) 715-7331, Facsimile No. (541) 715-8581 or Scott A. Lund at Telephone No. (612) 573-2006, Facsimile No. (612) 573-2005. In addition, all correspondence should continue to be directed to the following address:

IP Administration  
Legal Department, M/S 35  
HEWLETT-PACKARD COMPANY  
P.O. Box 272400  
Fort Collins, Colorado 80527-2400

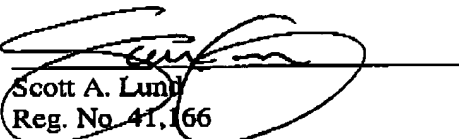
Respectfully submitted,

Mark Haines et al.,

By,

DICKE, BILLIG & CZAJA, PLLC  
Fifth Street Towers, Suite 2250  
100 South Fifth Street  
Minneapolis, MN 55402  
Telephone: (612) 573-2006  
Facsimile: (612) 573-2005

Date: AUGUST 10, 2006  
SAL:hsf

  
Scott A. Lund  
Reg. No. 41,166

**CERTIFICATE UNDER 37 C.F.R. 1.8:** The undersigned hereby certifies that this paper or papers, as described herein, are being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (571) 273-8300 on this 10<sup>th</sup> day of August, 2006.

By   
Name: Scott A. Lund

**Appeal Brief to the Board of Patent Appeals and Interferences  
of the United States Patent and Trademark Office**

Appellant: Mark Haincs et al.

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**CLAIMS APPENDIX**

1. (Previously Presented) A filter for a printhead assembly, the filter comprising:  
a frame having a first face and a second face opposite the first face, and an opening formed therein communicated with the first face and the second face;  
separate filter material provided on each the first face and the second face of the frame, and enclosing the opening of the frame; and  
a fluid fitting associated with the frame, the fluid fitting including a fluid port offset from the frame and a fluid passage communicated with the opening of the frame and the fluid port.
2. (Previously Presented) The filter of claim 1, wherein the filter material is secured to the first face and the second face of the frame around a perimeter of the opening.
3. (Original) The filter of claim 1, wherein the filter material has a mesh size in a range of approximately 2 microns to approximately 20 microns.
4. (Original) The filter of claim 1, wherein the filter material is adapted to allow liquid ink to pass therethrough, and wherein the filter material is adapted to prevent air from passing therethrough when the filter material is wetted by the liquid ink.
5. (Original) The filter of claim 1, wherein the fluid passage of the fluid fitting is adapted to direct air from the fluid port of the fluid fitting to the opening of the frame.
6. (Original) The filter of claim 5, wherein the filter material is adapted to trap air within the opening of the frame.
7. (Original) The filter of claim 1, wherein the fluid port of the fluid fitting has a longitudinal axis, and wherein the frame is oriented substantially parallel with the longitudinal axis of the fluid port.

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8. (Original) The filter of claim 7, wherein the fluid passage of the fluid fitting has a surface oriented at an angle to the longitudinal axis of the fluid port.
9. (Original) The filter of claim 8, wherein the angle is approximately a right angle.
10. (Original) The filter of claim 8, wherein the angle is an acute angle.
11. (Cancelled)
12. (Original) The filter of claim 1, wherein the frame has a substantially rectangular shape, and wherein the fluid port of the fluid fitting extends from a side of the substantially rectangular shape.
13. (Original) The filter of claim 12, wherein the frame includes at least one separator extending within the opening of the frame between opposite sides of the substantially rectangular shape.
- 14-44. (Cancelled)

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**EVIDENCE APPENDIX**

None.

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**RELATED PROCEEDINGS APPENDIX**

None.